# **Assistant Mason**

(Job Role)

(Qualification Pack: Ref. Id. CON/Q0102)

Sector: Construction

Textbook for Class IX



राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद् NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

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### **FOREWORD**

The National Curriculum Framework–2005 (NCF–2005) recommends bringing work and education into the domain of the curricular, infusing it in all areas of learning while giving it an identity of its own at relevant stages. It explains that work transforms knowledge into experience and generates important personal and social values such as self-reliance, creativity and cooperation. Through work one learns to find one's place in the society. It is an educational activity with an inherent potential for inclusion. Therefore, an experience of involvement in productive work in an educational setting will make one appreciate the worth of social life and what is valued and appreciated in society. Work involves interaction with material or other people (mostly both), thus creating a deeper comprehension and increased practical knowledge of natural substances and social relationships.

Through work and education, school knowledge can be easily linked to learners' life outside the school. This also makes a departure from the legacy of bookish learning and bridges the gap between the school, home, community and the workplace. The NCF–2005 also emphasises on Vocational Education and Training (VET) for all those children who wish to acquire additional skills and/or seek livelihood through vocational education after either discontinuing or completing their school education. VET is expected to provide a 'preferred and dignified' choice rather than a terminal or 'last-resort' option.

As a follow-up of this, NCERT has attempted to infuse work across the subject areas and also contributed in the development of the National Skill Qualification Framework (NSQF) for the country, which was notified on 27 December 2013. It is a quality assurance framework that organises all qualifications according to levels of knowledge, skills and attitude. These levels, graded from one to ten, are defined in terms of learning outcomes, which the learner must possess regardless of whether they are obtained through formal, non-formal or informal learning. The NSQF sets common principles and guidelines for a nationally recognised qualification system covering Schools, Vocational Education and Training Institutions, Technical Education Institutions, Colleges and Universities.

It is under this backdrop that Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent of NCERT has developed learning outcomes based modular curricula for the vocational subjects from Classes IX to XII. This has been developed under the Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education of the Ministry of Human Resource Development.

This textbook has been developed as per the learning outcomes based curriculum, keeping in view the National Occupational Standards (NOS) for the job role and to promote experiential learning related to the vocation. This will enable the students to acquire necessary skills, knowledge and attitude.

I acknowledge the contribution of the development team, reviewers and all the institutions and organisations, which have supported in the development of this textbook.

NCERT would welcome suggestions from students, teachers and parents, which would help us to further improve the quality of the material in subsequent editions.

New Delhi January 2018 HRUSHIKESH SENAPATY

Director

National Council of Educational

Research and Training

## ABOUT THE TEXTBOOK

The construction sector in India is considered to be the second largest employer and contributor to economic activity, after the agriculture sector. This sector employs more than 44.08 million people in the country. Around 50 per cent of the demand for construction activities in India comes from the infrastructure sector, while the rest comes from industrial activities, residential and commercial development, etc. The construction industry accounts for about 11 per cent of India's GDP. The Planning Commission estimates that the construction sector will require another 47 million people in the workforce over the next decade.

There is a need for formal training for construction workers. This book contains sessions for imparting knowledge and skills on various aspects of the construction technology. It also includes information, exercises and assessment activities.

This textbook has been developed with the expertise of the vocational teachers, industry experts and academicians for making it a useful and inspiring teaching-learning resource material for the vocational students. Adequate care has been taken to align the content of the textbook with the National Occupational Standards (NOS) for the job role so that the student acquires the necessary knowledge and skills as per performance criteria mentioned in the respective NOS of the Qualification Pack (QP). The NOS for the job role of 'Assistant Mason' covered through this textbook are as follows:

- 1. CON/N0101: erect and dismantle temporary scaffold of 3.6 meter height
- 2. CON/N0105: handle and use hand and power tools related to masonry work
- 3. CON/N0106: assist in tiling, stone laying and concrete masonry works
- 4. CON/N0107: assist in brick or block work including fixing doors and windows and plastering works
- 5. CON/N8001: work effectively in a team to deliver desired results at the workplace
- 6. CON/N9001: work according to personal health, safety and environment protocol on construction site

Unit 1 of the textbook gives introduction to the building structure. Unit 2 focusses on building material. Unit 3 deals with units of measurement used in civil works. Unit 4 is on handling of basic masonry tools. Unit 5 deals with the marking of lines. Unit 6 explains the building drawing and Unit 7 discusses about the foundation works.

ONCER PUBLISHED

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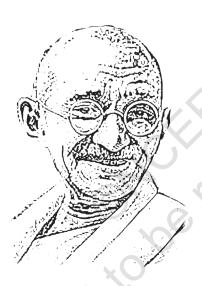
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I am uncompromising in the matter of woman's rights. In my opinion, she should labour under no legal disability not suffered by man. I should treat the daughters and sons on a footing of perfect equality.